



BP Cherry Point Refinery  
4519 Grandview Road  
Blaine, WA 98230

**Mike Torpey**  
**Cherry Point Cogeneration**  
**Environmental Manager**  
(360) 371-1757

March 12, 2001

Allen Fiksdal  
Manager, Energy Facility Site Evaluation Council  
Department of Community, Trade, and Economic Development  
925 Plum Street SE, Building 4  
Olympia, Washington 98504-3172

ATTENTION: Mr. Allen Fiksdal

RE: REQUEST TO INITIATE A POTENTIAL SITE STUDY FOR THE BP CHERRY  
POINT COGENERATION PROJECT IN WHATCOM COUNTY, WASHINGTON

Dear Allen:

This letter is a request to initiate a Potential Site Study, pursuant to WAC 463-22-040, for the BP Cherry Point Cogeneration Project. Enclosed is a \$10,000 check pursuant to WAC 463-22-030, to initiate the work of your independent contractor.

The purpose of the Potential Site Study is to determine content and issues that must be addressed in the Application for a Site Certification Agreement and to involve agencies and the public early in the permitting process. It is a significant commitment to perform a potential site study and we anticipate that the overall permitting process will be shorter and more efficient because of it. The proposed project is still in development. We are providing you a general description at this time, and anticipate that we will have much more detailed information available by the time EFSEC's independent consultant is hired to work on the Potential Site Study.

Our goal is to :

- Create the most efficient power plant possible by co-generating heat and steam for the refinery;
- Reduce overall emissions from the site when considering the power plant and refinery together;
- Share power with Washington businesses and communities, and

- Build on a site intended for heavy industry.

The council should not consider the project description found in this letter to be a commitment to specific design features. We have people from all over the world working diligently on these goals as we continue to develop the project and work through the Potential Site Study and we anticipate that aspects of the project may change.

**Project Description:**

The BP Cherry Point Refinery is proposing to build an approximately 750 MW natural gas fired combined-cycle combustion turbine cogeneration facility on approximately 25 acres of land adjacent to the BP refinery. The plant would be configured with three (3) combustion turbines each driving an electric generator. Each of the gas turbine trains would be equipped with a heat recovery steam generator and duct firing capability to augment steam production. Steam would be produced at high pressure in the heat recovery steam generators and sent to one (1) or two (2) steam turbine driven electric generators, each with extraction and condensing capability. The refinery would also serve as a "steam host" for a portion of the steam produced by the combustion turbine. Natural gas would be supplied through an existing company owned proprietary natural gas pipeline line running directly from Canada to the refinery. The electrical interconnection would occur approximately one mile east of the refinery on an existing 230 kv BPA radial line which runs from the Custer substation to Alcoa Intalco Works. The entire project, including the new transmission line, would be on refinery owned property, and would be entirely contained in a Major Industrial Urban Growth Area/Port Industrial as defined in the Whatcom County Comprehensive Plan, issued May 20, 1997. The entire area is zoned Heavy Impact Industrial.

**General Description of the Area in Which the Project is to be Located:**

The BP Cherry Point Refinery and BP Property Boundaries are illustrated on Figure 1. The BP Refinery and land is mainly zoned Heavy Impact Industrial and Light Industrial and is entirely contained in Cherry Point Major Industrial Urban Growth Area /Port Industrial as defined in the Whatcom County Comprehensive Land Use Plan (Whatcom County - May 20, 1997). The Cherry Point Major Industrial Urban Growth Area/Port Industrial is approximately 6500 acres of which currently approximately 2500 acres is used for heavy impact industries. Figures 2 and 3 are the Land Use Zone Maps from the Comprehensive Plan of the Cherry Point Sub area and of western Whatcom County, respectively. The proposed 25-acre site for the BP Cherry Point Cogeneration Project is shown on Figures 1 and 2 and is surrounded by a minimum of 0.5 miles of industrial land use zones. The proposed site for the Cogeneration Project is entirely within BP property and is approximately 0.75 miles from the nearest BP property boundary.

Land to the south of the BP Cherry Point property is zoned Heavy Impact Industrial for about four miles and extends to Georgia Strait and Slater Road. Land uses include the Alcoa Intalco Works primary aluminum smelting/refinery and the TOSCO oil refinery. Approximately four miles to the south is the Lummi Nations Reservation.

Land to the east of the BP property is zoned Heavy Impact Industrial for about 0.25 miles and Rural for an additional two miles to Olsen Road where the City of Ferndale Urban Reserve land use zone begins. Adjacent to the BP property is the BPA electrical power transmission corridor and Chemco wood treatment facility. BP land ownership extends to a portion of the BPA transmission corridor. Land uses within the Rural zone include agriculture and livestock farming between the BP property and the City of Ferndale. The city of Ferndale is approximately four miles from the nearest BP property boundary.

Land to the southeast is zoned Parks/Recreation and Rural. Lake Terrell is about one mile from the BP property and is within the Parks/Recreation zone. Lake Terrell is a wildlife refuge and used by the public for recreation. The remaining land use is agriculture and livestock farming extending for about two miles.

Land to the west of the BP property is zoned Heavy Impact Industrial for over a mile. A Puget Sound Energy peak generation facility is adjacent to a portion of the BP property with the remainder of the industrial zone land use being agricultural and livestock farming. Land further to the west and northwest is Point Whitehorn and Birch Bay State Park, which is used for residential, resort and recreation. Point Whitehorn is defined as an Urban Growth Area in the Comprehensive Plan. Birch Bay Park extends along the shoreline and is used for recreation. Georgia Strait supports recreation, navigation and commercial fisheries industry.

Land to the north of the BP property is zoned Rural and Residential-Rural. Land uses include residential and again agricultural and livestock farming. The Birch Bay Township is approximately one mile and the City of Blaine is six miles north of the BP property. Both communities are defined identified as Urban Growth Areas in the Comprehensive Plan. Birch Bay is a resort community, which has a high potential for future development. Birch Bay has historically been primarily a second- home resort area, but the trend is toward increased permanent residential and retirement dwellings. Currently, a high proportion of the dwellings are still second-homes.

#### **Significant Features:**

Heavy Impact Industrial Zone

Combined-cycle

Cogeneration

Emission offsets

Existing refinery owned natural gas line

Transmission interconnection one mile east of the refinery

Existing water line

Existing refinery waste water system

Refinery property

Adjacent to existing refinery

**Project Site:** The entire project, including the transmission line route, is located on refinery owned property. The entire project is also located within a Major Industrial

Urban Growth Area/Port Industrial as defined in the Whatcom County Comprehensive Plan, issued May 20, 1997. The entire project is zoned Heavy Impact Industrial.

**Turbines/electric generators:** Three (3) combustion turbines each driving an electric generator and one (1) or two (2) steam turbines each driving an electric generator, for total estimated electrical generation capacity of 750 MW. BACT is anticipated to be Dry Low – NO<sub>x</sub> burner technology and Selective Catalytic Reduction (SCR) for NO<sub>x</sub> control and Catalytic Oxidation for CO control.

**Heat Recovery Steam Generators:** Each of the gas turbine trains will be equipped with a heat recovery steam generator.

**Cogeneration:** A portion of the steam produced will be diverted to the refinery to serve an existing steam load and as a result the refinery may be able to shut down some older utility steam boilers. The cogeneration feature of this project will make the project more efficient and may provide offsetting emission reductions. Other thermal integration projects are being evaluated at this time.

**Fuel:** Natural gas will be obtained from a company owned proprietary pipeline, which currently routes natural gas from Sumas directly to the BP refinery. The refinery owns 90% of the natural gas pipeline and Alcoa Intalco Works owns the remaining 10%. The pipeline obtains gas from Westcoast Energy at a terminus on the Canadian side of the border at Sumas.

**Transmission Lines:** Electrical power from the project will be carried through new 230 kv transmission lines which will be routed to an interconnection point approximately one mile east of the project, across refinery owned property, to the 230 kv BPA radial line between the Custer substation and Alcoa.

**Water Resources:** Whatcom PUD #1 currently services The BP refinery. Additional water for the project would be provided pursuant to existing contract and water rights through the PUD. Refinery water reuse projects are also being evaluated as a source of water for the project.

**Waste Water:** Waste water would be discharged through the existing refinery waste water treatment system.

Upon accepting this request to initiate the Potential Site Study, please set up a process so that we may meet with the EFSEC staff and the independent consultant to develop the scope, a time and cost estimate, and a payment schedule for the study.

March 12, 2001

5

---

If you require additional information, please don't hesitate to call me at (360) 371-1757.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Mike Torpey', written in black ink.

Mike Torpey  
Cogen Environmental Manager  
BP Cherry Point Refinery  
4519 Grandview Rd.  
Blaine, WA 98230